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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,178	03/17/2005	Guenther Ittmann	262233US0PCT	6502
22850	7590	07/11/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER SASTRI, SATYA B	
			ART UNIT 1713	PAPER NUMBER
			NOTIFICATION DATE 07/11/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/528,178	Applicant(s) ITTMANN, GUENTHER	
	Examiner Satya B. Sastri	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/17/05, 3/13/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to application filed on March 17, 2005. Claims 1-3 are now pending in the application.

Specification

2. The specification is objected to for the following reasons:

The section heading "Prior art" appears twice on page 1 of the specification. The contents may be consolidated under one section heading.

The formula on page 2 is incoherent. It does not show the charges on the ions correctly. Additionally, based on the inventive product description in the specification (on page 7, lines 15-20 and page 8), the formula as shown on page 2 is incorrect. The compound is prepared from monoalkyl- or dialkyl phosphate and therefore, the oxygen atom in the formula should have a subscript of 4 and not 3.

The use of the trademarks (Plexiglass® GS on page 1, line 21 and Zelec ® on page 8, line 9) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

3. Claim 1 is objected to for an incoherent formula (I) in the body of the claim. Firstly, the positive charge on the nitrogen atom and the negative charge on the oxygen atom are not shown correctly. Secondly, the formula appears to be incorrect as inferred from the product description (page 7, lines 15-20) and working example 1 (page 8). Given that the compound is derived from a dialkyl phosphate, the oxygen atom in Formula I should have a subscript of 4 and not 3. Thirdly, the charge on the anion would differ depending upon the value of n. Additionally, applicants may amend claim 1 for clarity by including a structure for formula I to show the bonding of alkyl groups.

In claim 1, the scope of "methyl methacrylate mixtures" is not clear.

In claim 1, there should be an "or" between the last two alkyl groups that define R^1 and R^2 .

In claim 1, a period is missing at the end of the claim.

In claim 2, the phrases "of the polymerizable monomers" and "of the monomer mixture" essentially mean the same.

In claim 3, it is unclear as to what the phrase "using a compound" means. It is not clear if the molding compound comprises the compound of formula I or if the compound is merely used during processing but is not present in the molded product.

Claim 3 is incomplete because it is an independent claim that does not define what formula I represents.

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Appropriate corrections are required.

Claim Rejections - 35 USC § 101 and 112

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 and 2 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

7. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

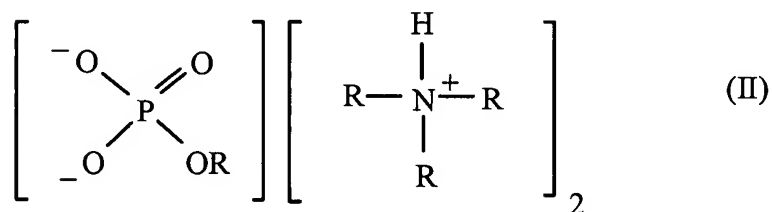
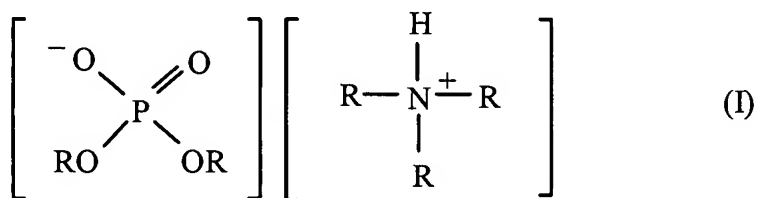
Claims 1 provides for the use of a compound, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps

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delimiting how this use is actually practiced. Claim 2 is rejected for being dependent on rejected claim 1.

Claim Interpretation

8. Formula I recited in claim is incorrect for reasons presented above in paragraphs 2 and 3. The general structures of compounds represented by formula I are interpreted by the examiner to be I and II as shown below:



Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection

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is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 10/566,000 to Ittmann (published as US 2006/0237872 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other for the reasons given below:

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Copending claims disclose a method for inhibiting adhesion to a mold, the method comprising the step of providing an alkylamino salt or mono- or dialkyl substituted phosphoric acid during cast polymerization of methyl methacrylate mixtures. Although the copending claims do not explicitly disclose the compound as a heat stabilizer, such is clearly within the scope of its claims because such a feature is an inherent property of the compound. Instant claims that relate to a process of cast polymerization of monomeric mixtures comprising methyl methacrylate in the presence of alkylamino salt or mono- or dialkyl substituted phosphoric acid and a molded product encompass the limitations of the copending claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 1-3 are directed to an invention not patentably distinct from claims 1-4 of commonly assigned copending application No. 10/566,000 to Ittmann (published as US 2006/0237872 A1). Specifically, see the discussion set forth in paragraph 10 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned 10/566,000, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting

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inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

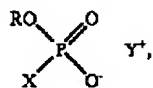
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Haas et al. (WO99/16602).

At the outset, it is noted that WO99/16602 is being used for date purposes. However, WO99/16602 is in German and therefore, US 6,471,905 B1 is used as the US equivalent in the body of the rejection. All column and line citations are to the US equivalent.

Haas et al. disclose internal release agents for producing polyurethane molded objects (abstract). The internal mold release agents may be ammonium salts of phosphoric acid ester of formula I:

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wherein R stands for a C₁-C₁₀ alkyl group, X denotes OR¹ with R¹ being equal to R or O⁻Y⁺ and Y stands for NH₄ or N(R²R³R⁴R⁵), wherein R² to R⁵ may be the same or different and denote hydrogen or C₁-C₁₀ alkyl group (col. 2, lines 1-18).

The prior art discloses polyurethane plastic molded bodies with internal mold release agents. To the extent that the instant claim recites a plastic molding produced by using a compound of formula I (i.e. alkylamino salts or mono- or dialkyl substituted phosphoric acid shown as compound I and II in the claim interpretation section above) without actually specifying if the molded product comprises the compound, and given that Haas et al. disclose polyurethane plastic molded bodies, the prior art anticipates the presently cited claim.

In the alternative, the prior art to Haas et al. anticipates the instant claim because it discloses a genus of ammonium salts of phosphoric acid esters useful in plastic molding process and explicitly includes the species of alkylamino salt or mono- or dialkyl substituted phosphoric acids of instant invention (shown as compound I and II in the claim interpretation section above). In particular, Haas et al. disclose salts wherein the anion may have a C₁-C₁₀ alkyl group and Y may be N(HR³R⁴R⁵) wherein R³ to R⁵ may be a C₁-C₄ alkyl group. Given that the species are clearly named, the prior art to Haas et al. anticipates the presently cited claim.

14. The subject matter of instant claims 1 and 2 is deemed patentably distinct over closest prior art of record to Haas et al. (WO99/16602, used in rejection of claim 3 above) and JP 62089756 cited as A reference in the International Search Report. The prior art of record does

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not teach or suggest the process of cast polymerization of monomeric mixtures comprising methyl methacrylate in the presence of alkylamino salt or mono- or dialkyl substituted phosphoric acid.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112. The examiner can be reached on Wednesdays and Fridays, 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached at (571) 272 1114.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SATYA SASTRI

June 8, 2007